

To: "Mathew, Rooni" [RMathew@moffattnichol.com]
Cc: "Garland, Edward" [Edward.Garland@hdrinc.com]; Xiong, Yi" [YXiong@moffattnichol.com]; Jan.vanBeek@deltares.nl" [Jan.vanBeek@deltares.nl]; ugenia Naranjo/R2/USEPA/US@EPA;Stephanie Vaughn/R2/USEPA/US@EPA[]; tephania Vaughn/R2/USEPA/US@EPA[]
From: "Wands, James"
Sent: Thur 2/14/2013 3:43:24 PM
Subject: RE: ST-SWEM dredging
[\[mailto:RMathew@moffattnichol.com\]](mailto:RMathew@moffattnichol.com)
Jan.vanBeek@deltares.nl

Rooni,

At the time that I sent you the code, ST-SWEM handled the carbon concentration in the cap/backfill. Here are the few steps that it goes through in vssd_G3C.f:

- 1)Cap/Backfill set to 100% non-cohesive in ECOM
- 2)ECOM bed composition is read and checked. The code finds CCOH10/AR < MINCCOH10/AR and adds enough cohesive material to meet the minima (0.1% from the input).
- 3)The code later checks that the sum of the POM (TOTPOM) is not greater than the cohesives (SCOSS). If the TOTPOM > SCOSS all POM variables are scaled back by SCOSS/TOTPOM.

This approach has since been revised with the sequence below:

- 1)Cap/Backfill set to 1% cohesive in ECOM.
- 2)Cap/Backfill FOC set to 0.1%.
- 3)Cap POM reduced accordingly.

If you have any questions just let me know.

James

From: Mathew, Rooni [mailto:RMathew@moffattnichol.com]
Sent: Tuesday, February 12, 2013 12:32 PM
To: Wands, James
Cc: Garland, Edward; Xiong, Yi; Jan.vanBeek@deltares.nl
Subject: ST-SWEM dredging

Hi James,

We have been looking at ST-SWEM and incorporating similar remediation-related logic (Jan and Leo mainly) into the carbon simplification approach. We have a question regarding the carbon concentrations in the cap/backfill material. We have a ST-SWEM code version from Mar 30, 2012 that Jan has been using

as the basis for setting up the carbon simplification approach. However, the code does not reset the POC in the cap or backfill material to zero or some low value as we expected at the end of remediation. We would like to verify this with you, and also check if there were any further modifications to ST-SWEM since the version from about a year ago. Thanks,

Rooni.